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Patent Search

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Abstract:

The invention presents an Automated Image Artifact Removal and Reconstruction Using Self Supervised Neural Architectures. The present invention comprising a me storing image data and neural network parameters, an input interface for receiving input images containing artifacts and an output interface for providing output im: removed artifacts and enhanced visual quality. Further, the neural architecture is trained on a diverse dataset of images with artifacts to enable efficient artifact remc reconstruction. The input interface includes one or more of a camera, scanner, or image file reader. The output interface includes one or more of a display, printer, o writer. Accompanied Drawing [FIG. 1-2]

Complete Specification

Description:[001] The invention, in general, relates to the technology field of neural networks. More particularly, the present invention relates to an automated imag artifact removal and reconstruction using self-supervised neural architectures

BACKGROUND OF THE INVENTION

[002] The following description provides the information that may be useful in understanding the present invention. It is not an admission that any of the informati provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[003] Addressing image artifacts and reconstructing high-quality images is a complex and multifaceted challenge. It requires advanced computational techniques ar algorithms that can effectively identify, remove, and reconstruct damaged or missing image information. Conventional methods for artifact removal often involve rr intervention, which is time-consuming and may not scale to handle large datasets.

[004] Digital images play a significant role in various domains, including medical imaging, photography, and computer vision applications. However, these images ar subject to various artifacts and imperfections that can hinder their quality and utility. Image artifacts can result from a variety of sources, such as sensor noise, com algorithms, transmission errors, and imperfect imaging equipment. Addressing these artifacts and reconstructing images to their pristine state is a crucial task that numerous practical applications.

[005] Accordingly, on the basis of aforesaid facts, there remains a need in the prior art to provide an automated image artifact removal and reconstruction using sel supervised neural architectures, therefore, it would be useful and desirable to have a system, method, and interface to meet the above-mentioned needs.

SUMMARY OF THE PRESENT INVENTION

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